



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/063,756	05/10/2002	William Michael Rudnick	SLA0364.1	1571
27518	7590	03/21/2006	EXAMINER	
SHARP LABORATORIES OF AMERICA, INC			HOM, SHICK C	
5750 NW PACIFIC RIM BLVD			ART UNIT	
CAMAS, WA 98642			PAPER NUMBER	
			2616	

DATE MAILED: 03/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/063,756

Applicant(s)

RUDNICK ET AL.

Examiner

Shick C. Hom

Art Unit

2666

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 10 May 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 18-22 is/are allowed.
- 6) ☒ Claim(s) 1-16, 23 and 24 is/are rejected.
- 7) ☒ Claim(s) 17 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Specification***

1. The disclosure is objected to because of the following informalities: in page 1 of the specification, update status of related applications, i.e. in line 7 after "February 28, 2001" insert ---,now abandoned---, and in line 17 after "March 5, 2001" insert ---,now U.S. Patent No. 6,839,331---. Appropriate correction is required.

2. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

### ***Oath/Declaration***

3. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required.

See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because: it does not does not identify this application as application number 10/063,756 with filing date of 5/10/2002.

Art Unit: 2666

It does not state that the person making the oath or declaration believes the named inventor or inventors to be the original and first inventor or inventors of the subject matter which is claimed and for which a patent is sought.

The date the oath was signed is missing the year.

### ***Claim Objections***

4. Claims 1-24 are objected to because of the following informalities: in claim 24 lines 6, 9, and 10, the words "a first wireless network station" and "a first station" seem to refer back to "the first wireless network station" recited in claim 24 lines 3-4. If this is true, it is suggested changing "a first wireless network station" and "a first station" to ---the first wireless network station--- and ---the first station---, respectively. In claims 1-24 line 1, delete "[c1], [c2], . . . [c24]" and replace with ---Claim 1., Claim 2., . . . Claim 24.---, respectively. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

5. Claim 23 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Art Unit: 2666

In claim 23 lines 14 and 17 which recite "said stations in said second group" and "said second group" lack clear antecedent basis because no stations in a second group have been previously recited in the claim and therefore the limitation is not clearly understood.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1, 5, 7-14 are rejected under 35 U.S.C. 102(e) as being anticipated by Chuah (6,285,665).

Regarding claim 1:

Chuah discloses a method of prioritizing communication among wireless network stations in a network, said method comprising: including at least one wireless network station in a priority group; using said priority group to identify stations

Art Unit: 2666

for prioritized communications; and excluding stations not included in said priority group (see col. 11 lines 46-63 which recite assigning different priorities to remote nodes attempting to gain access to the system including through wireless modems by dividing them into priority group or priority classes whereby higher priority nodes have access and col. 36 lines 40-54 which recite that unless QoS can be maintained any new connection will be denied admission clearly reads on excluding stations not in the priority group as in claim 1).

Regarding claim 5:

Chuah discloses wherein said prioritized communications provide multi-level priority to stations within said priority group (see col. 21 lines 41-65 which recite the priority class with different stack level clearly reads on the multi-level priority as in claim 5).

Regarding claims 7, 11-13:

Chuah discloses wherein prioritized communications comprise providing priority access to transmission opportunities and wherein said priority access to transmission opportunities comprises an adjustment in the quantity of transmission opportunities to account for bandwidth variation due to frame size differences; wherein said prioritized communications comprise providing priority based substantially on bandwidth

Art Unit: 2666

parameters; wherein said wireless network complies with the ANSI/IEEE 802.11 Standard (see col. 35 line 45 to col. 36 line 4 which recite admission control support multiple bandwidth requirement and different QoS requirement including adjustment to the bandwidth requirement and col. 17 lines 11-27 which recite the frame size and use of the IEEE 802 standard).

Regarding claims 8-9:

Chuah discloses wherein inclusion in said priority group is based on station device type; and wherein inclusion in said priority group is based on transmission type (see col. 13 line 31 to col. 14 line 3 which recite the type field in the frame).

Regarding claim 10:

Chuah discloses wherein stations with devices that have high bandwidth requirements are automatically placed in said priority group (see col. 38 lines 29-41 which recite giving more bandwidth to higher priority connection by dropping lower priority users reads on automatically placing high bandwidth requirements in priority group).

Regarding claim 14:

Chuah discloses wherein said wireless network comprises a protocol providing an intermittent contention free period during which said prioritized communications take place (see col. 11 lines 15-33 and col. 31 lines 17-34 which recite the contention

Art Unit: 2666

period, the intermittent contention-free period and the contention-free bandwidth reservation request).

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).



Art Unit: 2666

9. Claims 2-4, 6, 15-16, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chuah (6,285,665) in view of Seppala et al. (6,747,968).

Regarding claims 15-16, 24:

Chuah discloses the method of providing Quality of Service (QoS) prioritization for wireless network stations in a network comprising a scheduler wherein said scheduler receives priority requests from stations as in claims 15-16 (see col. 29 lines 36-57 which recite the use of priority and scheduling to balance between high bandwidth efficiency and QoS for a wireless system).

For claims 2-4, 6, 15-22, and 24 Chuah discloses the method and apparatus described in paragraph 7 of this office action. Chuah discloses all the subject matter of the claimed invention with the exception of wherein said priority group is a priority polling list as in claims 2, 15, 24; wherein said priority polling list is a subset of a wireless network polling list as in claim 3; wherein said priority polling list is ordered in a sequential priority order different from a sequential order of said wireless network polling list as in claim 4; and wherein said multi-level priority is achieved by repetitive listing of a station in said priority group as in claim 6.

Seppala et al. from the same or similar fields of endeavor teach that it is known to provide wherein said priority group is a priority polling list; wherein said priority polling list is a subset of a wireless network polling list; wherein said priority polling list is ordered in a sequential priority order different from a sequential order of said wireless network polling list (see col. 3 lines 8-25 which recite placing the terminal identification of each terminal in a polling list based on the weighted polling factor of the terminal clearly anticipate the priority polling list); wherein said multi-level priority is achieved by repetitive listing of a station in said priority group (see col. 3 lines 8-65 which recite the each weighted polling factor being denoted by the number of times each terminal is to be polled and that the data transfer manager polls the terminals in the polling list based on the number of times the terminal identification is listed in the polling list clearly anticipate the repetitive listing of a station). Thus, it would have been obvious to the person having ordinary skill in the art at the time the invention was made to provide the priority group being a priority polling list; wherein said priority polling list is a subset of a wireless network polling list; wherein said priority polling list is ordered in a sequential priority order different from a sequential order of

Art Unit: 2666

said wireless network polling list; and wherein said multi-level priority is achieved by repetitive listing of a station in said priority group as taught by Seppala et al. in the communications method and apparatus of Chuah. The priority group being a priority polling list; and wherein said multi-level priority is achieved by repetitive listing of a station in said priority group can be implemented by using the technique of polling and whereby multi-level priority is achieved by repetitive listing of a station in said priority group of Seppala et al. in the method for accessing the system of Chuah. The motivation for using a polling list as taught by seppala et al. in the communication method and apparatus of Chuah being that it provides more efficiency for the system since the system give each user an opportunity to transmit and receive information in the system which is shared.

***Allowable Subject Matter***

10. Claims 18-23 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

11. Claim 17 would be allowable if rewritten to include all of the limitations of the base claim and any intervening claims.

***Conclusion***

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Sugita discloses a wireless communicating method, wireless communicating system, communicating station, and controlling station.

Gage et al. disclose dynamic radio link adaptation.

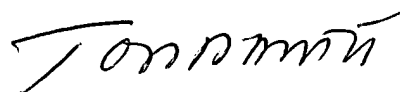
13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shick C. Hom whose telephone number is 571-272-3173. The examiner can normally be reached on Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on 571-272-3174. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2666

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SH



DANG TON  
PRIMARY EXAMINER